Sterilizing Devices Using a Glass Bead Sterilizer in Dentistry and Surgery

The waiting period between patients should not be wasted in any way. The dentist conducting the procedure or the surgeon preparing a small instrument may not have enough time to conduct a steam sterilization process due to the long cycle. In this case, a **glass bead sterilizer** for dental and surgical application can be effective for the chairside sterilization of small metallic instruments within a short period of time.

What Is a Glass Bead Sterilizer?

This small piece of equipment heats up the glass bead mixture up to very high temperatures of 220°C to 250°C with the help of the built-in heater chamber. A small instrument (endodontic file, root canal reamer or acupuncture needle) put inside the hot beads for 10 to 20 seconds gets sterilized from surface bacteria due to the high temperature and the application of dry heat transfer through glass beads.

Why Dental and Surgical Practice Need Such Equipment

The advantage of such piece of equipment for the sterilization process is its time efficiency. With the help of this equipment, the healthcare professional is able to sterilize small and solid items between patients during one visit as the time needed for completing a sterilization cycle is less than the time taken by the autoclave.

When to Use and When Not to Use This Device

It is vital to understand that the use of this machine for the sterilization process cannot replace other sterilization techniques. **Glass bead sterilizer** should be used only as the supplementary chairside sterilization equipment for small and solid instruments which can be entirely inserted inside the heating chamber. It is not applicable for large surgical sets, porous materials and other devices requiring validation of sterility assurance.

Criteria That Help Distinguish Quality Units from Low-quality Products

All glass bead sterilizers are not equal. Some machines cannot provide even heating or proper temperature maintenance. It is vital to choose devices with a precise digital or analog temperature control, quick warming period, an insulated outer shell to avoid burns and the bead chamber sufficient for immersing the instrument tip. The build quality is also important to guarantee the longevity and durability of the equipment.

Application in Other Fields

In addition to their wide application in general dentistry practices, these devices can also be used in podiatry practices, acupuncture practices, tattoo/piercing parlors, small outpatient surgical clinics owing to the fast instrument turn around that is required there. These sterilization techniques are also widely applied in veterinary dentistry due to similar needs in instrument sizes.

Our Glass Bead Sterilizers

The glass bead sterilizers manufactured by Bionics are made to work effectively and safely, thus, offering dental and surgical professionals effective chairside sterilization device which will serve you not for several months of its utilization.

Conclusion

Thus, it is impossible to replace the basic sterilizing system with the **glass bead sterilizer** for dental and surgical uses, but it is indeed the way to solve the problem of instruments sterilization between cycles, which cannot be done without it.